

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application. Where claims have been amended and/or canceled, such amendments and/or cancellations are done without prejudice and/or waiver and/or disclaimer, and Assignee reserves the right to claim this subject matter in a continuing application:

1. (Currently Amended) A method ~~for determining a restored position~~, comprising:

moving a scanner head along a first direction to scan a document;

stopping the scanner head and defining a position where the scanner head stops ~~[[at]]~~ as a restored position, and defining a portion of data of the document scanned at the restored position as a restored graphic data;

moving the scanner head along a second direction with a first distance, wherein the second direction is opposite to the first direction;

moving the scanner head along the first direction with a second distance, wherein the second distance is smaller than the first distance;

moving the scanner head along the first direction in a stepping manner to scan the document, so as to obtain ~~[[a]]~~ graphic data ~~for each step that the scanner head moves;~~

comparing the graphic data with the restored graphic data to select a graphic data closest to the restored graphic data ~~defined~~ defining as a connecting graphic data; and

connecting the connecting graphic data with graphic data scanned thereafter and with the restored graphic data.

2. (Currently Amended) The method according to claim 1, ~~wherein and further comprising removing the~~ graphic data scanned before the connecting graphic data ~~is removed after the step of connecting the~~ graphic data.

3. (Currently Amended) The method according to claim 1, ~~wherein the step of connecting the~~ graphic data further comprises replacing the restored graphic data with the connecting graphic data.

4. (Currently Amended) The method according to claim 1, wherein the restored graphic data comprises a first plurality of standard pixels, ~~while each of~~ and the graphic data comprises a second plurality of pixels, and wherein comparing the graphic data with the restored graphic data comprises comparing a part portion of the second plurality of pixels are compared to a part portion of the first plurality of standard pixels in the corresponding positions in the step of comparing the graphic data with the restored graphic data.

5. (Currently Amended) The method according to claim 1, wherein the restored graphic data comprises a first plurality of standard pixels, ~~while each of~~ and the graphic data comprises a second plurality of pixels, and wherein comparing the graphic data with the restored graphic data comprises comparing all at least some of the second plurality of pixels are compared to the first plurality of standard pixels in the corresponding positions in the step of comparing the graphic data with the restored graphic data.

6. (Currently Amended) The method according to claim 1, wherein ~~the step of comparing the graphic data includes~~ comprises comparing a part portion of the graphic data first scanned to the restored graphic data.

7. (New) An apparatus, comprising:

means for moving a scanner head along a first direction to scan a document;

means for stopping the scanner head and means for defining a position where the scanner head stops as a restored position, and defining a portion of data of the document scanned at the restored position as a restored graphic data;

means for moving the scanner head along a second direction with a first distance, wherein the second direction is opposite to the first direction;

means for moving the scanner head along the first direction with a second distance, wherein the second distance is shorter than the first distance;

Attorney Docket: 112.P14214

means for moving the scanner head along the first direction to scan the document, so as to obtain graphic data;

means for comparing the graphic data with the restored graphic data to select a graphic data closest to the restored graphic data and defining as a connecting graphic data; and

means for connecting the connecting graphic data with graphic data scanned thereafter and with the restored graphic data.

8. (New) The apparatus of claim 7, further comprising means for removing the graphic data scanned before the connecting graphic data after connecting the graphic data.

9. (New) The apparatus of claim 7, wherein the means for connecting the graphic data further comprises means for replacing the restored graphic data with the connecting graphic data.

10. (New) The apparatus of claim 7, wherein the restored graphic data comprises a first plurality of pixels, and the graphic data comprises a second plurality of pixels, and wherein the means for comparing the graphic data with the restored graphic data comprises means for comparing a portion of the second plurality of pixels to a portion of the first plurality of pixels.

11. (New) The apparatus of claim 7, wherein the restored graphic data comprises a first plurality of pixels, and the graphic data comprises a second plurality of pixels, and wherein the means for comparing the graphic data with the restored graphic data comprises means for comparing at least some of the second plurality of pixels to the first plurality of pixels.

12. (New) The apparatus of claim 7, wherein the means for comparing the graphic data comprises means for comparing a portion of the graphic data first scanned to the restored graphic data.

13. (New) An article comprising: a storage medium having stored thereon instructions that, if executed, results in determining a restored scanning position by:

moving a scanner head along a first direction to scan a document;

stopping the scanner head and defining a position where the scanner head stops as a restored position, and defining a portion of data of the document scanned at the restored position as a restored graphic data;

moving the scanner head along a second direction with a first distance, wherein the second direction is opposite to the first direction;

moving the scanner head along the first direction with a second distance, wherein the second distance is smaller than the first distance;

moving the scanner head along the first direction in a stepping manner to scan the document, so as to obtain graphic data;

comparing the graphic data with the restored graphic data to select a graphic data closest to the restored graphic data and defining as a connecting graphic data; and

connecting the connecting graphic data with graphic data scanned thereafter and with the restored graphic data.

14. (New) The article of claim 13, wherein said storage medium further includes instructions that, if executed, further result in the graphic data scanned before the connecting graphic data being removed after connecting the graphic data.

15. (New) The article of claim 13, wherein said storage medium further includes instructions that, if executed, further result in connecting the graphic data by replacing the restored graphic data with the connecting graphic data.

16. (New) The article of claim 13, wherein the restored graphic data comprises a first plurality of pixels, and the graphic data comprises a second plurality of pixels, and wherein comparing the graphic data with the restored graphic data comprises means for comparing a portion of the second plurality of pixels to a portion of the first plurality of pixels.

Attorney Docket: 112.P14214

17. (New) The article of claim 13, wherein the restored graphic data comprises a first plurality of pixels, and the graphic data comprises a second plurality of pixels, and wherein comparing the graphic data with the restored graphic data comprises means for comparing at least some of the second plurality of pixels to the first plurality of pixels.

18. (New) The article of claim 13, wherein said storage medium further includes instructions that, if executed, further result in comparing the graphic data by comparing a portion of the graphic data first scanned to the restored graphic data.